

# FIELD-NOTES ON THE MAGPIE, AS OBSERVED IN CUMBERLAND.

BY

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COURTSHIP.—On a few occasions I have seen the courtship of the Carrion-Crow (*Corvus c. corone*) and the Rook (*C. f. frugilegus*) and with both species the displays were similar. The sexes were recognized by their behaviour. The male approached the female and, with outspread wings and tail, bowed to her, at times almost touching the ground or tree branch (according to where the courtship was being conducted) with his bill, whilst at intervals a "Caw, caw" was uttered. I have never seen the Magpie (*Pica p. pica*) displaying in this way, but during the early part of 1924 the following displays were noted which evidently have some connexion with courtship. The first display was seen on February 16th, a warm, sunny day, but lost some of its value through my inability to recognize the sexes, though perhaps the birds which indulged in flights were males. There were seven Magpies in the top branches of a tree, chattering a good deal and pursuing one another about the branches. Now and again a bird would give expression to some musical-sounding notes like "Chōōk, chōōk," and as well as one could judge these notes were uttered by either sex. Also, fairly frequently, but always separately, three Magpies (males?) would fly from the tree, perform a short flight, and then return to the same branch whence they started. Only these three birds indulged in flights, each one usually flying the same distance each time, and whilst one was performing a flight the others kept chattering, pursuing each other, and uttering their "Chōōk, chōōk." The flights were generally carried out in silence and in the case of one bird the flight was twice as long as that of the others, wavering for some time before it turned and went back. Once two Magpies were seen fighting, using their feet, but the fight lasted only for a minute. After half an hour of this display the birds flew away, one by itself, the rest in pairs.

On March 11th, another sunny day, five Magpies flew into a holly bush in a neighbouring field. They began to pursue each other about the branches, chattering the while, and sometimes uttering their "Chōōk, chōōk" notes. Two birds indulged in flights, and the five performed as already described. After about twenty minutes of this the birds

separated, one going by itself, the others in pairs. Five minutes later they returned, performed as described for ten minutes, and then departed as before.

On the evening of March 12th my attention was attracted by the chattering and "chōōk" notes of Magpies in a hawthorn bush, and going towards the bush I found six in it, all engaged in a general *mêlée*, but my approach frightened the birds away.

The last display was noted on the evening of March 29th, when four Magpies were seen in a fir tree, performing as described above. However, in the early morning of April 17th I noticed four others pursuing one another about the branches of a tree, but as none of them either indulged in flights or uttered the "chōōk" notes, it is probable they were paired.

NEST BUILDING.—The Magpie shows a decided preference for the same nesting locality year after year, so that sometimes the same tree is used for several years in succession, and occasionally one finds a nest built upon the remains of those of one or two previous years. Some pairs begin nest building in March, from the second week onwards, but usually April has arrived before the majority commence their nests. With the early nests there is often a considerable interval—as long as three weeks—between the completion of the nest and the laying of the first egg. The first nests built are usually very solid—and conspicuous—structures, built in about three weeks, the nest proper taking about two weeks, the lining another week. Both sexes assist in the work of building the nest, which is constructed of sticks and earth, moulded into a cup shape and overlaid with earth, then covered with a dome of sticks, an opening being left in the dome for entrance and exit. The dome-opening is often situated on the least accessible side of the tree, whilst occasionally there are two openings. The cup is then usually lined with fibrous roots, the thicker roots next the earth, the finer roots for the eggs to lie on. I have not as yet been able to ascertain whether the lining of the nest is the work of one sex or both. On visiting nests early in a morning I have found moist earth adhering to the roots, suggesting that the Magpie collects live roots for the nest lining.

Individual Magpies have their own peculiarities, and hence all nests are not lined with fibrous roots. Some birds use binder-twine only, others a mixture of horsehair and roots, or hair, roots, and twine, whilst I have twice found a nest

lined entirely with horsehair and have also noted paper in the lining. One nest built in a sycamore tree was lined entirely with oak leaves. However, these are just individual eccentricities, the usual lining being fibrous roots.

The dome is generally built of thorny sticks, but one may find domes built entirely of non-thorny sticks or else of a mixture of thorny and non-thorny material and, if possible, the birds entwine the branches of the nest-tree into the dome. I have found nests in hawthorns covered with domes of non-thorny sticks and nests in fir trees whose domes were made of thorny sticks and *vice versa*.

Most nests are built either in hawthorn bushes or else in Scotch pines or larches, and it is noticeable that the nest is built, if possible, on two or three branches. When situated in a hawthorn or fir tree it is usually in the topmost branches, but occasionally a pair will nest in a hawthorn hedge, and on these occasions it may be found in the middle of the bush, indeed, not more than four feet from the ground. Also, if allowed, the birds are fond of nesting in a hedge beside a poultry-run or a clump of trees surrounding a farmhouse. Besides the Scotch fir and larch other trees utilized are the oak, ash, sycamore, and alder.

If the first laying of eggs is taken or destroyed, another nest is built and a second clutch laid, but if this clutch is destroyed the birds do not lay again that season. The second nest is usually not so well built as the first, and is often found within fifty yards of the first. A second laying may be looked for about a month after the first has been taken.

LAYING AND INCUBATION.—The clutch varies from three to eight eggs, but the latter I have only found once and, curiously, all the eggs were infertile. Nests with three and four eggs are genuine first clutches as I have found by visiting the nests daily during the laying-period. One egg is laid each day, the female covering the eggs at night. In 1924 ten nests were visited daily during the laying-period to discover when incubation commenced, and it was found that with a clutch of three or four eggs incubation did not commence until the full clutch was laid, but with a larger clutch incubation usually commenced after the fourth or fifth egg. I have never watched a nest to see whether both sexes assist in incubation, but from the behaviour of the bird when put off the eggs I judge that the female alone incubates. Thus on putting a Magpie off a clutch of eggs it flies away quietly, but if its mate is near, which often is

the case, the latter starts chattering, and the noisier bird I take to be the male. Also if one visits the nest before incubation has started and both birds are near it, one will invariably chatter as long as anyone remains in the vicinity, but the other bird is often silent.

If an egg does not hatch it is left in the nest. Full clutches are not usually found here until the third or fourth week in April, but as the birds will lay again if robbed, fresh eggs may be found until the first or second week of June. The average incubation-period is seventeen to eighteen days, and the fledging-period twenty-four to twenty-seven days.

| Nest. | Clutch. | First Egg. | Last Egg. | Hatched  | Incubation Period. | Number of Young Reared. | Left the Nest. | Fledging Period. |
|-------|---------|------------|-----------|----------|--------------------|-------------------------|----------------|------------------|
|       |         |            |           |          | Days.              |                         |                | Days.            |
| 1     | 7       | April 17   | April 23  | May 10   | 17                 | 5                       | June 5         | 26               |
| 2     | 3       | April 7    | April 9   | April 27 | 18                 | 1                       | May 21         | 24               |
| 3     | 7       | May 7      | May 13    | May 30   | 17                 | 4                       | June 23        | 24               |
| 4     | 6       | May 22     | May 27    | June 14  | 18                 | 5                       | July 11        | 27               |
| 5     | 6       | May 26     | May 31    | June 18  | 18                 | 5                       | July 12        | 24               |

In the above cases, all the eggs proved fertile.

THE YOUNG.—The nestlings have flesh-coloured skins, free of any down, their mouths coloured inside deep flesh-colour, the external flanges pinkish-flesh. The skins rapidly assume a yellow tinge and when the nestlings begin to fledge, a greyish tinge. The coloration of the mouth inside changes first to pink, then to a deeper pink, and finally to purple, but the young may have left the nest before this final phase of mouth coloration is assumed. The nestlings are blind until seven or eight days old. When fledged the young have the iris pale grey. When they leave the nest their tails are not more than five inches long and they skulk about the undergrowth, fed by their parents, and doing little flying until their tails are full grown.

I have never known all the young to be reared, and usually one nestling, sometimes two or three, disappear. The figures in the above table are typical of the number of young reared in proportion to those hatched. Five young reared out of six hatched is a good average and one has known only two to be reared out of five hatched and four out of seven. Food probably plays an important part in the matter as most Magpies appear to collect all their food within a half-mile radius of the nesting-site, and with a large family to support, no doubt the supply is not always equal to the

demand, and the last-born nestlings die of starvation or are killed by their stronger brethren. I am convinced they do not fall out of the nest, for occasionally a fledged youngster is found dead at the base of a nest-tree, but never, in my experience, an unfledged one. Besides, the shape of the nest is against a nestling falling out.

FEEDING OF THE YOUNG.—All the data with regard to the brooding and feeding of the young was obtained from two nests watched during 1924. The young are brooded during the day until they are ten or eleven days old. Both sexes assisted in feeding, often arriving at the nest together. Magpies usually adopt a circuitous route in visiting the nest and on reaching the nest-tree are greeted by the chirping of their family, which is kept up until the adults have left. Occasionally also an adult was heard to utter a crooning-like noise whilst feeding the young. No fæces were ever seen to be carried away, but the insides of the nests are always kept clean, so presumably the fæces are swallowed by the adults or else dropped outside the nest, as the branches below are sometimes very much splashed. No food could be detected in the adults' beaks when they arrived at the nest.

Nest 1. Four young, seven days old. Fed five times in three hours. (2-5 p.m.)

Nest 1.—Four young, twelve days old. Fed three times in two hours. (7-9 p.m.)

Nest 2.—Five young, nine days old. Fed four times in two hours. (9.30-11.30 a.m.)

Nest 2.—Five young, seventeen days old. Fed twelve times in two hours. (1.15-3.15 p.m.)

As the nestlings become fledged they are apt to be noisy, and the nest may be found by hearing the young calling out for food. Also on being handled they are usually very noisy. Their chattering will often bring the adults into the nest-tree. After leaving the nest the young remain with their parents some time and then appear to be driven away, as during July and August one sees fighting occurring amongst undoubted family parties.

FLOCKING AND ROOSTING HABITS.—During the winter months the Magpie is partly gregarious and in places where they are not molested parties of fifteen to twenty can be seen during the daytime. In these same localities, however, odd pairs are to be seen, so possibly the small flocks may consist of unmated birds. With the approach of night all

the Magpies in a neighbourhood flock together and roost in some favourite locality, often a fir wood or tall hedgerow. I note that dusk has usually fallen before the birds, with much chattering, go to roost, and indeed, with the exception of the Carrion-Crow, the Magpie must be the last bird to go to roost. This roosting habit lasts into the month of April, when they commence building, and during that work some pairs roost in their nest-trees at night, but when the female has begun to lay the male evidently roosts elsewhere. If two or three pairs in the same neighbourhood are robbed of their first clutches the birds will flock again for a few days, until they begin their second nests.

FEEDING HABITS.—In the early autumn months the Magpie may be seen perched on the back of a sheep, searching its fleece for insects. Outside the autumn months I have only one record of a Magpie on a sheep's back, in early March. Throughout the winter the birds are often noticed overturning the droppings of beasts in order to get any concealed insects. With the advent of spring and cultural operations on the land attention is paid to the newly-sown cornfields, but the birds appear to visit these fields more when the corn is two or three inches high. It is during the spring and early summer that the Magpie commits most damage, as it takes any eggs it can find. When a nest is found, generally both Magpies will visit it, and usually one bird keeps guard whilst the other robs the nest. In my experience the egg or eggs (as occasionally two eggs are carried at once) are taken away in the beak, laid on the ground, broken, and eaten. I have never seen a Magpie take a young bird, but have no doubt it will occasionally do so, especially if it has young to feed. Thus one day I noticed a pair of Starlings driving a Magpie away from their nest, which was situated in the roof of a deserted house and contained partly fledged young. The following day the young had disappeared. Another time a pair of Willow-Warblers were observed attempting to drive a Magpie away from their nest of young, flying at it and striking it with their wings. In both these cases the Magpies had nests of young. On a third occasion I had concealed myself near a Kingfisher's nest. Hardly was I hidden before a Magpie flew down to a branch beside the tunnel and craned its neck up the tunnel as if wondering whether it could reach the young, but eventually it flew away.

However, the Magpie is liable to have its eggs taken by other birds, the principal thief being the Carrion-Crow, and

they will always attack any Crows that venture too near their nests. These are not the only occasions when Magpies will attack Crows, as I have known a pair dispute with a pair of Carrion-Crows the possession of a clump of fir trees, evidently desired by both species for breeding purposes. Except in the case of the Carrion-Crow it is rarely that the Magpie will show fight, usually contenting itself with chattering loudly at any enemies. One morning my brother and I visited a Magpie's nest in a Scotch pine and as we approached the nest heard the chattering of Magpies. Just as the nest-tree was reached we saw a squirrel make its way out of the nest closely pursued by the two birds, chattering loudly but not attacking it. On climbing up to the nest I found one egg broken and a number of Magpie's feathers sticking to the inside of the nest-dome, suggesting that the squirrel had surprised the Magpie whilst brooding the eggs.

When feeding, Magpies usually keep by themselves, and if in a large flock, one or two birds are often posted as outlook in some hedge or tree. Occasionally one or two may be seen feeding with a flock of Rooks, but generally the latter drive them away.

Although the Magpie is a conspicuous bird its habitual caution, and the close resemblance between the sexes, render the task of observation by no means an easy one.